

AMENDMENTS TO THE SPECIFICATION

Please delete Paragraph [0006]. Please replace Paragraph [0016] on page 4 and Paragraph [0020] on page 6 with the following paragraphs, respectively:

[0016] Figures 1a-c depict the components of a composite 20 in accordance with the teachings of the present invention. Shown is a component 22 formed from a reinforced vinyl ester resin. By reinforced it is meant that the vinyl ester resin includes fibers such as glass, synthetic fibers such as Kevlar®, carbon fibers, metallic fibers or particulate by way of non limiting example. ~~Preferably, [[e]]~~Each component contains at least one complete and preferably several very large loops of continuous fibers which are incorporated into the primary load bearing portions of the structure. By primary load-bearing portion it is meant that the segment is designed to withstand the majority of tensile, compressive, shear and other static or dynamic loading conditions placed on the composite. Additionally, fibers in the form of a woven mat, individual fibers in chopped or unchopped form or combinations thereof can be used in generally non-load bearing areas to assist in holding the structure together. Particularly useful as a continuous fibers are e-glass yarns, available from Owens Corning. A commercially available vinyl ester resin, which is useful in accordance with the teaching of the present invention is made by Dow Chemical, with the e-glass yarn. Under a highly preferred embodiment, the main component 22 will be formed of a multi-layer construction designated by references numerals 24a and b.

[0020] As previously mentioned, prior to curing, the continuous fibers 28 are incorporated into the resin bed to form a pre-preg laminate 24. The specific fibers and volume fractions of fibers within the uncured epoxy are dependent upon the

engineering specification of the component being produced. Generally, however, the thickness of the component will be modified by using multiple layers of the uncured resin materials. With reference generally to Figure 2, the layers of the materials are formed into large loops 30 which are incorporated in their uncured state into the mold. After being cured and shaped by the mold, these large loops will become the load bearing portions of the assembly 20. For example, the vehicle suspension component depicted in Figures 1a-b is designed to accept tensile and compressive loading. Most of the stresses are borne by the primary load-bearing portions or top and bottom 32 and 34 of the generally I-beam construction. The spanner 26 between the top and bottom portion 32 and 34 is formed using either a resin chopped fiber mix or a resin woven glass construction. While this construction is capable of taking some load, it is envisioned that a majority of the load will be taken by the top and bottom portions of the I-beam construction. The continuous fibers 28 increase both the strength and consistency of production parts. Short fiber reinforced parts can have knit lines where the fibers/resin do not fully form one part. The continuous fibers 28 allow the part to be made without these knit lines, thus reducing the number of failure locations sites.

[0021] Figures 3a-3c represent and alternate composite according to the teachings of the present invention. Shown is a spanner bar 40, which is designed to take a compressive as well as tensile loads. The spanner bar 40 has a plurality of continuous fiber laminate layers 24 forming at least one complete fiber loop circumscribing generally surrounding the periphery 42 of the structure.